

# YSDN240 SERIES 240W



Yingjiao's metal case power family designed with slim housing and for full range AC input from 90V AC TO 264V AC.

The series are single phase PSU, providing adjustable DC output voltage. They have high efficiency and operate in wide temperature range.

The series can widely used for industrial automation & control systems, varied equipments etc.



## Features



DC O/P Voltage Adjustable



Universal AC Input 90-264V



Protection: Short Circuit/Overload /Over Voltage/Over Temperature



Free Air Convection Design



Installation: DIN Rail TS-35/7.5 & 15



With build-in active PFC function



Three Years Warranty

## Model Information

Yingjiao Part number	DC VOLTAGE	RATED CURRENT (Max.)	RATED POWER	VOLTAGE ADJ. RANGE
YSDN240-24010000	24V	10A	240W	24-28V
YSDN240-48005000	48V	5A	240W	48-55V

## Input

VOLTAGE RANGE	90 ~ 264VAC, 127 ~ 370VDC [DC input by connecting AC/L(+),AC/N(-)]
FREQUENCY RANGE	47~63Hz
POWER FACTOR (Typ.)	>0.98/115VAC at full load > 0.95/230VAC at full load
EFFICIENCY (Typ.)	87% YSDN240-24010000 88% YSDN240-48005000
AC CURRENT (Typ.)	2.5A/115VAC 1.3A/230VAC
INRUSH CURRENT (Typ.)	37.2A/115VAC 70A/230VAC
LEAKAGE CURRENT	<1mA / 240VAC

## Output

RIPPLE & NOISE (max.)	150mVp-p
VOLTAGE TOLERANCE	± 2.0%
LINE REGULATION	± 0.5%
LOAD REGULATION	± 1.0%
SETUP, RISE TIME	1500mS/100mS(115V/60HZ full load) 3000mS/100mS(230V/50HZ full load)
HOLD UP TIME (Typ.)	16mS(230V/50HZ full load) 12mS(115V/60HZ full load)

## Protection

<b>OVER LOAD</b>	105 ~ 130% rated output power, Protection type : Hiccup mode, recovers automatically after fault condition is removed
<b>OVER VOLTAGE</b>	29 ~ 33V      YSDN240-24010000 56 ~ 65V      YSDN240-48005000 Protection type : Shut down o/p voltage, re-power on to recover
<b>OVER TEMPERATURE</b>	Shut down o/p voltage, recovers automatically after temperature goes down

## Environment

<b>WORKING TEMP.</b>	-20 ~ +70 °C (Refer to "Derating Curve")
<b>WORKING HUMIDITY</b>	20 ~ 95% RH non-condensing
<b>STORAGE TEMP.</b>	-40 ~ +85 °C , 10 ~ 95% RH
<b>STORAGE HUMIDITY</b>	10 ~ 95% RH
<b>MTBF</b>	1398.4K hrs min. Telcordia SR-332 (Bellcore)

## SAFETY & EMC

<b>SAFETY STANDARDS</b>	UL508, BS/EN62368-1
<b>WITHSTAND VOLTAGE</b>	I/P-O/P:3KVAC    I/P-FG:2KVAC    O/P-FG:0.5KVAC
<b>ISOLATION RESISTANCE</b>	I/P-O/P, I/P-FG, O/P-FG:>100M Ohms / 500VDC / 25 °C / 70% RH
<b>EMC EMISSION</b>	Compliance to BS EN/EN55032 , BS EN/EN61000-3-2,-3
<b>EMC IMMUNITY</b>	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55035, BS EN/EN61000-6-2 (BS EN/EN50082-2)

## Note

- 1.All parameters NOT specially mentioned at 230VAC input, rated load and 25 °C of ambient temperature.
- 2.Ripple&noise are measured from peak to peak with band width limit of 20MHz(0.1uF and 47uF/50V parallel capacitor under DC output full load,AC nominal input 25 °C ambient temperature).
- 3.Installation clearances: top with 40mm, bottom with 20mm, left and right with 5mm. Increase the space to 10-15mm when the adjacent device is heat source.
- 4.Derating may be needed under low input voltage. Please check the derating curve for more details.
- 5.Efficiency test after 30 minutes of burn-in.
- 6.The ambient temperature derating of 3.5 °C /1000m for operating altitude higher than 2000m(6500ft).

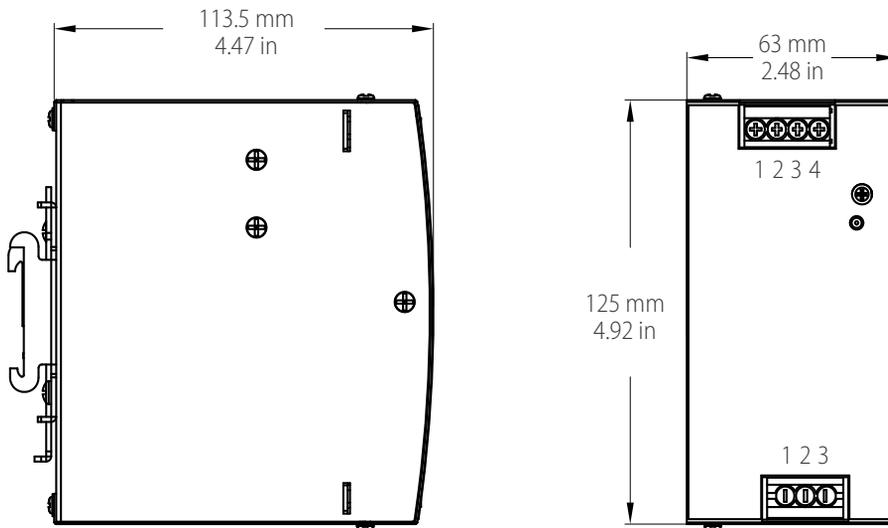
## Dimensions & Weight

<b>Width:</b>	63mm / 2.48in
<b>Height:</b>	125mm / 4.92in
<b>Depth:</b>	113.5mm / 4.47in
<b>Weight:</b>	1kg

## Packing

<b>Carton Size:</b>	52.5 x 33 x 17.5 CM 20.67 x 12.99 x 6.9 in
<b>Master Carton Quantities:</b>	10pcs / Carton

# Mechanical Specification



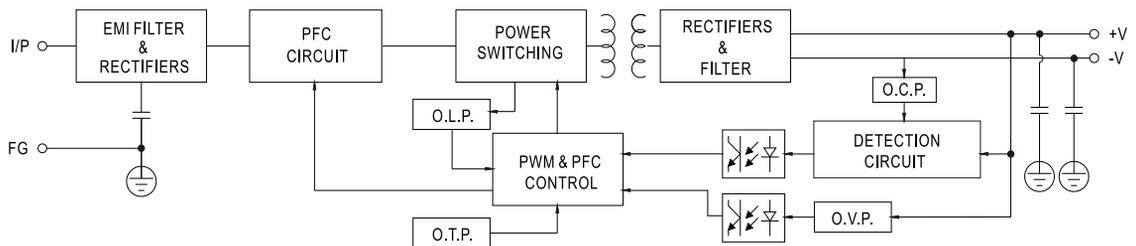
## Input

No.	Description
1	FG ⊕
2	AC/N or DC -
3	AC/L or DC +

## Output

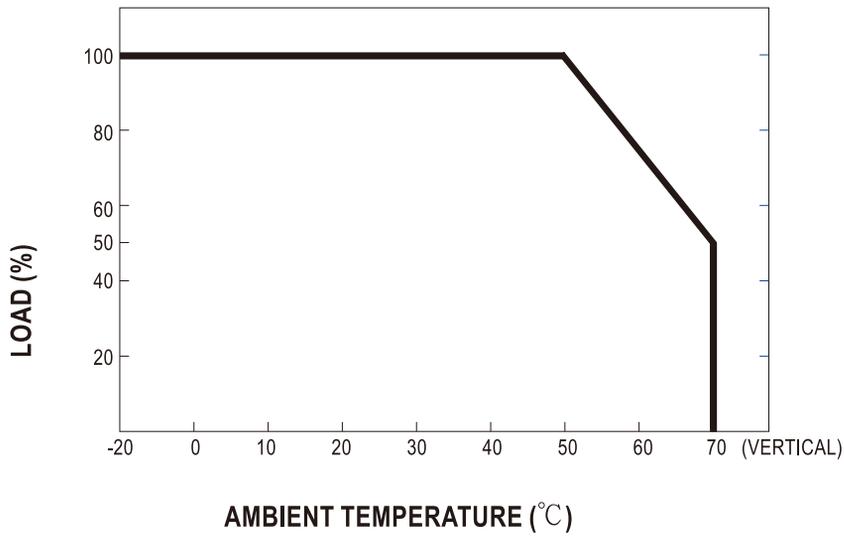
No.	Description
1,2	DC OUTPUT -V
3,4	DC OUTPUT +V

# Block Diagram



## Deduction Curve And Temperature

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## Minus Output And Input Voltage Curves

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